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aerenchyma is BNL8.32 on the long arm of linkage group 7. Therefore it is concluded that the gene for aerenchyma was transferred to the long arm of *Zea* chromosome 7. The corresponding SSR marker for the BNL8.32 locus is bnlg1805.

The present invention provides a method of screening plants to determine if they are crosses between *Tripsacum* and teosinte by isolating their total genomic DNA, digesting the DNA with restriction enzymes, transferring it to Southern blots and probing it with mapped molecular markers to determine the presence of one or more novel or unique RFLPs as defined by probe-enzyme combination and molecular weight. The term "plant" as used in this application refers to the whole plant as well as its component parts, e.g., flowers, roots, fruits, stems, rhizomes, pollen. The crosses are performed using standard plant breeding techniques for controlled pollinations known in the art. Some of the *Tripsacum*-teosinte hybrid plants that are perennials and reproduce asexually as well as by seed have been described in the following plant patents: PP No. 9,640 issued September 3, 1996; PP No. 7,977 issued September 15, 1992, and PP No. 6,906 issued July 4, 1989. U.S. Patent No. 5,330,547 issued July 19, 1994, and U.S. Patent No. 5,750,828 issued May 12, 1998, describe a method for employing *Tripsacum*-teosinte hybrids to confer corn rootworm resistance to maize.

The present invention further provides a method of screening hybrid maize seed and plants to determine if they contain introgressed DNA segments from *Tripsacum*-teosinte hybrids by isolating the total genomic DNA, digesting the DNA with restriction enzymes, transferring it to Southern blots and probing it with mapped molecular markers to determine the presence of one or more novel or unique RFLPs as defined by probe-enzyme combination and molecular weight.

The present invention provides a method for marker assisted